

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY
OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:-**

/WHAT I CLAIM AS MY INVENTION:-

1. A tire valve-gauge combination comprising:

5 i. a rim-attaching base portion having:

a. a tire rim sealing portion having a lower body portion larger than the valve perforation of a conventional tire rim and a central neck portion having an outside diameter equal or lesser than said rim perforation to form a seal with said tire rim,

10 b. a rigid tubular inner sleeve moldedly integrated within the mid and upper inner cylindrical portion of the base,

c. a plurality of inwardly and upwardly protruding ridges adapted to prevent full descent of a piston, and

15 d. a piston is fixedly attached to a stem where, said piston is flexibly resilient and is adapted with a concave shape at its very bottom surface thereby promoting a durable continuous seal to the inner wall surface of the inner sleeve unless said piston is placed at or near the bottom area of said inner sleeve,

ii. a gauge portion having:

20 a. a tubular transparent rigid material onto which markings are disposed so as to allow user to view the pressure at the valve,

b. a lower base attaching portion fixedly attached to said base,

- c. an upper cap base attaching portion also fixedly attached to the lower portion of said cap base,
- d. an indicator frictionally attached to the upper end of the piston stem of the base portion,
- e. a lower spring frictionally engaged to the upper portion of the indicator, and
- f. a divider disk located between the joint where the cap base portion and gauge portion meet,

iii. A cap base made from a rigid material having:

- a. a generally tubular form and an array of circular and semi-circular inwardly protruding rings integral with the inner surface of said tubular cap base wherein;
 - i. the upper ring is fully circular,
 - ii. the upper stop ring is a pair of quarter rings,
 - iii. the lower stop ring is also a pair of quarter rings, and
 - iv. the lower ring is also fully circular,

iv. A cap portion having:

- a. a generally tubular form,
- b. a lower lip extending slightly outwardly from the bottom periphery thereof,
- c. a body portion having a mid to lower portion with an outer diameter generally equal to that of the opening at the top of the cap base,

- d. an upper portion having a diameter slightly reduced than that of the cap's mid to lower portion,
- e. an opening at the very top of said cap is provided and comprises a narrow top portion extending only slightly then beveled outwardly in two stages,
- 5 f. a plunger extends through the cap base and into the upper portion of the gauge,
- g. a dust cap, frictionally attached to said plunger is adapted to auto center to the opening at the top of the cap, where the upper portion of the dust cap has an upper sealing portion of equal or slightly smaller diameter than that
10 of the cap opening with which it mates, and
- h. an upper spring slidably engaged around the outside of the plunger wherein said upper spring is restedly engaged with the under side of the dust cap and also restedly engaged to the divider disk thereby compressing said spring when the cap is depressed downwardly to the end of its travel
15 distance.

- 2. The inner sleeve of the tire valve-gauge combination of claim 1 wherein said inner sleeve is adapted with flow ridges near the lowermost inner portion of said inner sleeve, and a necked portion integral with said inner sleeve preventing the piston from traversing outside the upper portion of said base thereby ensuring that the valve of the
20 present invention is never susceptible to leakage.

3. The tire valve-gauge combination of claim 1 wherein the piston has an outside diameter generally equal to the inner diameter of the inner sleeve in which it travels longitudinally.

4. The tire valve-gauge combination of claims 1 and 3 wherein, the piston is adapted with a concaved bottom surface so as to promote a positive seal when valve is under pressure.

5. The tire valve-gauge combination of claims 1, 3 and 4 wherein, the piston is fabricated of a rubber-like flexible, semi-resilient material.

6. The inner sleeve of the tire valve-gauge combination of claims 1 and 2 wherein, the mid to upper inner surface of the sleeve conforms to the outer profile of the piston and the lower portion of said sleeve does not, in order to break the seal to allow airflow around the piston.

7. The tire valve-gauge combination of claim 1 wherein the lower spring's strength can be altered to calibrate the valve for various pressure ranges.

8. ~~The lower spring of the tire valve-gauge combination of claims 1 and 7 wherein said~~
spring is retained by a divider disk between the lower portion of the cap base and the upper portion of the gauge portion.

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9. The tire valve-gauge combination of claim 1 wherein the indicator further comprises a luminous material, chargeable by daylight.

10. The cap of the tire valve-gauge combination of claim 1 further comprising an
5 outwardly protruding rim at its lower outer edge to prevent extraction of said cap from the cap base.

11. The cap base of the tire valve-gauge combination of claims 1 and 10 further
10 comprising a fully circular upper ring to prevent extraction of cap, a pair of upper quarter rings to prevent undesired descent of the cap, a pair of lower quarter rings to lock the cap in deflate mode without having to hold said cap down.

12. The tire valve-gauge combination of claims 1 through 11 wherein the use thereof is to
15 allow users to easily determine tire pressure within individual tires or vessels and the like without getting soiled or the need of separate gauges and tools.

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